

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 450 (ANNAPOLIS RD) AND I-95 SOUTHBOUND RAMP IN PRINCE GEORGE'S COUNTY. THE MODIFICATION WILL UPGRADE THE EXISTING PEDESTRIAN SIGNALS TO COUNTDOWN PEDESTRIAN SIGNALS AND THE EXISTING PEDESTRIAN PUSHBUTTONS TO AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

- THE INTERSECTION OPERATES IN A NEMA FOUR (4) PHASE, FULLY-ACTUATED MODE. MD 450 APPROACHES AND A PEDESTRIAN PHASE ACROSS I-95 SOUTHBOUND OFF RAMP OPERATE CONCURRENTLY. AND AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE WITH FLASHING RED ARROW IS PROVIDED FOR EASTBOUND LEFT TURNS. THE SOUTHBOUND APPROACH FOR I-95 SOUTHBOUND OFF RAMP OPERATES AS ITS OWN PHASE. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED TO CROSS MD 450 ACROSS THE WEST LEG. AN ALTERNATE PEDESTRIAN PHASE WITH AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED ACROSS MD 450 AND AND ACTUATED AUDIBLE PEDESTRIAN PHASE SHALL BE INSTALLED ACROSS THE I-95 SOUTHBOUND RAMP.
- AN EXISTING FULL-TRAFFIC-ACTUATED, EIGHT (8) PHASE CONTROLLER WITH INTERCONNECT IN A NEMA SIZE "6" BASE MOUNTED CABINET SHALL BE UTILIZED. A NEW 2-WIRE CENTRAL CONTROL UNIT FOR PEDESTRIAN SIGNAL OPERATION SHALL BE INSTALLED INTO THE CABINET.

III. SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:
TO CROSS MD 450 (ANNAPOLIS RD / NORTH-SOUTH)

- WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS ANNAPOLIS AT I-95 RAMP."
- WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS I-95 RAMP (EAST-WEST)

- WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS I-95 RAMP AT ANNAPOLIS."
- WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACTS

DISTRICT

MR. BRIAN YOUNG
DISTRICT ENGINEER
301-513-7311

MS. FELECIA MURPHY
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7358

MR. VICTOR GRAFTON
ASSISTANT DISTRICT ENGINEER - UTILITIES
301-513-7350

MR. KEVIN NOWAK & MR. DUANE BERNARD
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
301-513-7336

MR. VERNON STINNETT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670

MS. DARLENE EIDE
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9570	50.5 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
	5 EA	W11-2 - PEDESTRIAN CROSSING (30"x30")
	2 EA	W16-7p(R) - DIAGONAL ARROW RIGHT (24"x12")
	2 EA	W16-7p(L) - DIAGONAL ARROW LEFT (24"x12")
	1 EA	W13-4(1) - ACROSS RAMP (36"x24")
	1 EA	R4-7 - KEEP RIGHT (24"x30")
9571	24 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	1 EA	M5-1(6) - ASSOCIATED SHIELD ASSEMBLY (48"x72")

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

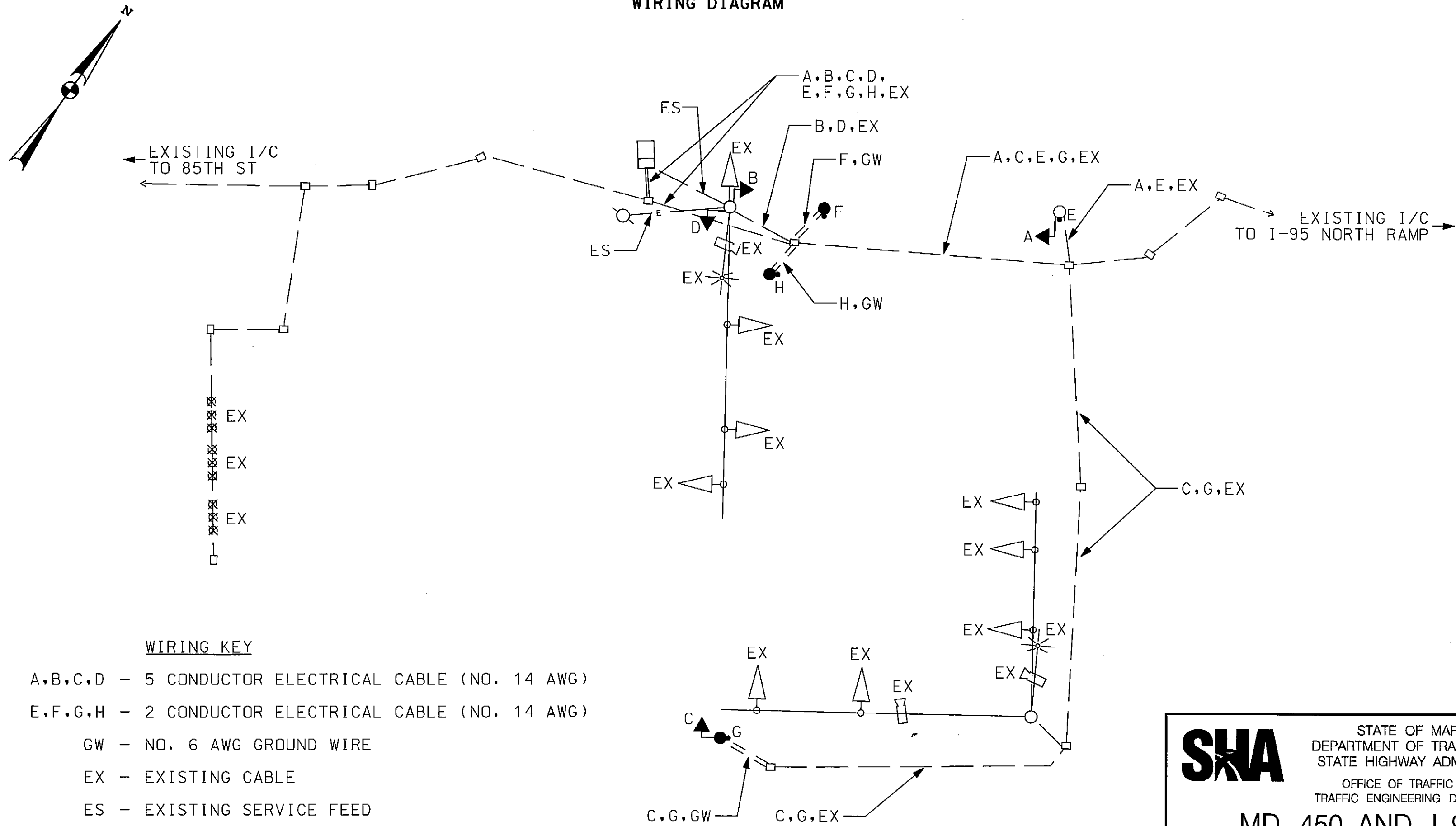
ITEM NO.	QUANTITY	DESCRIPTION
1001	500 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1002	1 LS	MAINTENANCE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
5005	505 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	3 EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	1 EA	FURNISH AND INSTALL 2 WIRE CONTROL UNIT
8004	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8005	4 EA	PEDESTRIAN EDUCATION SIGN
8007	1 EA	REMOVE AND DISPOSE PER ASSIGNMENT
8010	15 LF	WOOD SIGN SUPPORTS 4" X 4"
8011	1 EA	ADJUST EXISTING HANDHOLE
8012	45 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8013	35 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8015	50.5 SF	INSTALL GROUND MOUNTED SIGN
8019	2 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8020	625 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	640 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
NEG	1126 SF	REMOVAL OF EXISTING BRICK PATTERN
NEG	115 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
NEG	1 EA	REMOVE FOUNDATION 12" BELOW GRADE
NEG	87 LF	WOOD SIGN SUPPORTS 4" X 6"
NEG	24 SF	INSTALL POLE MOUNTED SIGN

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10-11	12-13
	⬅R➡	⬅R➡	R	R	R	R	R	R	R	⬅R➡	⬅R➡
	⬅Y➡	⬅Y➡	Y	Y	Y	Y	Y	Y	Y	⬅Y➡	⬅Y➡
	⬅G➡	⬅G➡	G	G	G	G	G	G	G	⬅G➡	⬅G➡
PHASE 1 & 6	⬅G➡	⬅G➡	G	G	R	R	R	R	R	DW	DW
1 CHANGE	⬅Y➡	⬅Y➡	G	G	R	R	R	R	R	DW	DW
PHASE 2 & 6	FL/RA	FL/RA	G	G	G	G	R	R	R	WK	DW
PED. CLEAR	FL/RA	FL/RA	G	G	G	G	R	R	R	FL/DW	DW
2 & 6 CHANGE	⬅R➡	⬅R➡	Y	Y	Y	Y	R	R	R	DW	DW
PHASE 4	⬅R➡	⬅R➡	R	R	R	R	G	G	G	DW	DW
4 CHANGE	⬅R➡	⬅R➡	R	R	R	R	Y	Y	Y	DW	DW
PHASE 4 ALT.	⬅R➡	⬅R➡	R	R	R	R	G	G	G	DW	WK
PED. CLEAR	⬅R➡	⬅R➡	R	R	R	R	G	G	G	DW	FL/DW
4 ALT. CHANGE	⬅R➡	⬅R➡	R	R	R	R	Y	Y	Y	DW	DW
FLASHING	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK
OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A, B, C, D - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E, F, G, H - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
GW - NO. 6 AWG GROUND WIRE
EX - EXISTING CABLE
ES - EXISTING SERVICE FEED

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 AND I-95 SB RAMP
SIGNAL MODIFICATION
NEW CARROLLTON, MD

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE MARCH 1, 2010 CONTRACT NO. AX7035168

DESIGNED BY M. FUKUJI COUNTY PRINCE GEORGE'S

DRAWN BY M. FUKUJI LOGMILE 16045004.57

CHECKED BY K. PERMISOHN CSW TMS NO. K179

FAP NO. TOD NO.

TS NO. 953F-GI DRAWING SG 02 OF 2 SHEET NO. 13 OF 15

PR
102

PARSONS BRINCKERHOFF
100 South Charles Street
14th Floor
Baltimore, MD 21201-2727
Phone: 410-727-2050
Fax: 410-727-4608